

comfort, and their beauty, flavour, and perfume are continual sources of enjoyment.

But there is a merciful provision in the ordering of mundane affairs, that to obtain the most good resulting from natural productions, mental and physical exertion is necessary, and the latent powers and faculties of mankind are aroused and stimulated by this necessity. The herbs, fruit trees and flowers which form the delight and profit of the horticulturist are scattered, but sparingly, over many regions of the earth; they exist in just sufficient quantities to attract the attention of man, and to preserve their species until he shall have discovered and appropriated them, but usually they do not grow in such abundance or quality as to form important articles of food, until they come under the skill of the cultivator.

Of course, these remarks apply only to the esculent vegetables, fruits, flowers, and ornamental trees and shrubs, and not to the plants which are adapted to the wants of the lower animals, such as the grasses with which the pastures and meadows are covered; although these may be improved by cultivation; nor to the trees of the forest, the uses of which are so varied and extensive for both man and beast. The brute creation, when in a wild state, are provided for, because they are deficient in the intellectual powers of man, nevertheless he has the advantage in being compelled to adopt, and cultivate the food necessary to his existence, for by this means his mental and bodily endowments are exercised, cultivated, and unfolded. These advantages are further enhanced by the power of culture to improve the natural products of the soil when subject to its influence. The flowers, the fruits, and the eatable vegetables which come under the care of the skilful horticulturist, gain new and important qualities, or at least, the properties they already possess, acquire additional value. Of one class, the symmetry, colour, or perfume are improved, of another its increased fruitfulness, size or flavour; so that plants, which in their

natural state may almost be considered worthless weeds, are converted, by judicious culture and management, into useful garden vegetables, delicious fruits, or beautiful flowers.

Such are the principles impressed by the vegetable world, which gave origin in the gardeners skill and raised his profession to the dignity of a science.

We have so far alluded only to the ethical principles upon which the science is founded, we will now examine them from a practical standpoint. These principles are borrowed from other sciences, such as, botany, chemistry, geology, meteorology, to botany he is indebted for the knowledge of the physical structure and uses of the different organs of plants; to chemistry, to the nature of manures, natural and artificial; to geology, for his knowledge of soils, and to meteorology, changes of climate.

In ancient times, gardeners were not supposed to be acquainted with any of these, and based their practice upon observation, legend, or the experience of others, hence their work was of a superficial nature, but now horticulture rests on a scientific basis and has progressed during the last century as rapidly and satisfactorily as any other science, so that the improved fruit, flowers, and vegetables would astonish our forefathers, as would the superior manner in which they are cultivated.

The art of the gardener has increased in importance with the wonderful advance of society, and the progress of commerce throughout the world; easy communication, rapid and safe traveling, have been great helps to horticulture; there is now a continual interchange of products between different countries, with corresponding advantages to each, as the field has widened a new class of men have sprung up, who are both scientific and practical gardeners, and have elevated horticulture into its proper place among the industrial arts. In the cities, where the population has become dense and the demand for luxuries and conveniences has become more eager, this improvement in horticulture is